

Amendments to the Specification:

Please replace paragraph [0026] with the following amended paragraph:

[0026] The present invention is directed to a system including means for delivering at least one therapeutic substance to a patient, the therapeutic substance delivery means comprising a microminiature implantable infusion pump, such as the pump 10 shown in FIG. 1, or the infusion pumps 10', 10'', 10''', 20, or 20' shown in FIGS. 2 through 6. Such pump(s) may be filled with a fluid 39 (FIG. 6) that consists of and/or contains a therapeutic substance(s) to be delivered to a patient. In some embodiments of this invention, such as implantable infusion pump 10'' (FIG. 3), the pump is capable of supplying direct current (DC) or electric current pulses with means for delivering therapeutic electrical stimulation to the patient, wherein the electrical stimulation means includes no less than two electrodes 14A and 14B and possesses one or more of the following properties:

Please replace paragraph [0043] with the following amended paragraph:

[0043] The dotted line 47 shown in FIG. 6 represents the boundaries of an exemplary hermetically-sealed case in which a control circuit 38, memory 36, pulse generator circuitry 45, power/data receiving circuit 42, and power source/storage 44 are housed. The large heavy dots on line 47 represent electrical feed-through connectors that allow electrical access into hermetically-sealed case 47. The dashed-dotted line 49 represents the boundaries of the entire microdevice 10'', which contains other elements which may not necessarily be included within the hermetically-sealed portion 47. These elements include, e.g., an inductive coil 46 or the like for receiving and transmitting RF data and/or power (for instance, with inductive coils 48 or by other means of communication, such as an RF transmitter and receiver), a pump or other driver 30, a reservoir 40 for holding fluid 39 (e.g., a drug), tubing 41 connecting reservoir 40 with driver 30, tubing 34 connecting driver 30 with regulator 32 and/or non-occluding device 35, which non-occluding device 35 keeps the tubing 34 and regulator 32 free from occlusions. Depending upon the type of driver 30 used, portions thereof (e.g., electronic control circuits and/or elements) may also be included within the hermetically-sealed portion 47 of the device 10''.

Please replace paragraph [0047] with the following amended paragraph:

[0047] The power source ~~[[of]]~~ used as a means for providing power to the implantable microdevice of the present invention may be realized using one or more of the following approaches, or other power source/storage options: